AMENDMENT TO THE CLAIMS

Applicants selectively amend the claims as follows:

Listing of Claims:

1   1. (Currently Amended) An apparatus comprising:

2   a ~~data path~~ general input/output communication port to implement a communication

3   stack including a physical layer, a data link layer and a transaction layer, the transaction layer to

4   include assembling ~~unit to output~~ a packet header for a request transaction ~~layer~~ packet to one or

5   more logical devices, the packet header including:

6   a format field to partially specify a format for the packet header ~~format~~, to specify

7   whether the request transaction ~~layer~~ packet includes a data payload and to specify a size

8   of the packet header; and

9   a type field to specify a transaction type, the transaction type to include at least

10   one selected from the following group of: a memory request, an input/output request, a

11   configuration request and a message request, wherein the format field and the type field

12   together specify the format for the packet header ~~format~~.

1   2-4. (Canceled).

1   5. (Currently Amended) The apparatus of claim 1, wherein the format field and the type field are

2   located in the first byte of the packet header ~~to be output by the data path output unit~~.

1   6. (Currently Amended) An apparatus comprising:

2   a ~~data path~~ general input/output communication port to implement a communication

3   stack including a physical layer, a data link layer and a transaction layer, the transaction layer to

4   include disassembling ~~unit to receive~~ a packet header for a request transaction ~~layer~~ packet

5   received at the general input/output communication port, the packet header including:

6   a format field to partially specify a format for the packet header ~~format~~, to specify

7   whether the request transaction ~~layer~~ packet includes a data payload and to specify a size

8   of the packet header; and

9   a type field to specify a transaction type, the transaction type to include at least

10   one selected from the following group of: a memory request, an input/output request, a

11   configuration request and a message request, wherein the format field and the type field

12   together specify the format for the packet header ~~format~~.

1   7-9. (Canceled).

1   10. (Currently Amended) The apparatus of claim 6, wherein the format field and the type field

2   are located in the first byte of the packet header ~~to be output by the data path output unit~~.

1   11. (Currently Amended) A system comprising:

2   a transmitting device to ~~transmit~~ include a general input/output communication port to

3   implement a communication stack including a physical layer, a data link layer and a transaction

4   layer, the transaction layer to include assembling a packet header for a request transaction ~~layer~~

5   packet to one or more logical devices, the packet header including:

6   a format field to partially specify a format for the packet header ~~format~~, to specify

7   whether the request transaction ~~layer~~ packet includes a data payload and to specify a size

8   of the packet header; and

9   a type field to specify a transaction type, the transaction type to include at least

10   one selected from the following group of: a memory request, an input/output request, a

11   configuration request and a message request, wherein the format field and the type field

12   together specify the format for the packet header ~~format~~; and

13   a receiving device to include the logical device ~~coupled to the transmitting device~~, the

14   receiving device to receive the packet header relating to the request transaction packet to the

15   logical device, the packet header received at a general input/output communication port, the

16   receiving device to implement the communication stack that includes the data link layer, the

17   physical layer and the transaction layer, the transaction layer to include disassembling the packet

18   header relating to the request transaction packet for the logical device to respond to the request

19   transaction packet.

1   12-14. (Canceled).

1   15. (Previously Amended). The system of claim 11, wherein the transmitting device and the

2   receiving device are coupled via a serial interface.

1   16. (Currently Amended). The system of claim 15, wherein the format field and the type field

2   are located in the first byte of the packet header ~~to be output by the transmitting device~~.

1   17-18. (Canceled).

1   19. (Currently Amended) An apparatus comprising:

2   a ~~data path~~ general input/output communication port to implement a communication

3   stack including a physical layer, a data link layer and a transaction layer, the transaction layer to

4   include assembling ~~unit to output~~ a packet header for a request transaction ~~layer~~ packet to one or

5   more logical devices, wherein the packet header includes:

6   a format field to partially specify a format for the packet header ~~format~~, to specify

7   whether the request transaction ~~layer~~ packet includes a data payload and to specify a size

8   of the packet header; and

9   a type field to specify a transaction type, the transaction type to include at least

10   one selected from the following group of: ~~of~~ a memory request, an input/output request, a

11   configuration request and a message request , wherein the format field and the type field

12   are located in the first byte of the packet header and together specify the format for the

13   packet header ~~format~~, the format field also indicates whether the transaction layer packet

14   includes payload data that is four-byte, naturally aligned and limited in size by a

15   maximum data payload size.

1   20-22. (Canceled).

1   23. (Previously Presented) The apparatus of claim 19, wherein the format field to specify the

2   size of the packet header comprises the size of the packet header based on a 32-bit addressing

3   format.

1   24. (Canceled).

1   25. (Previously Presented) The apparatus of claim 19, wherein the format field to specify the

2   size of the packet header comprises the size of the packet header based on a 64-bit addressing

3   format.

1   26. (Previously Presented) The apparatus of claim 1, wherein the format to specify the size of

2   the packet header comprises the size of the packet header based on a 32-bit addressing

3   format.

1   27. (Canceled).

1   28. (Previously Presented) The apparatus of claim 1, wherein the format field to specify the size

2   of the packet header comprises the size of the packet header based on a 64-bit addressing

3   format.

1   29. (Previously Presented) The apparatus of claim 1, wherein the packet header comprises the

2   packet header including a length field, the length field to specify the length of payload data.

1   30. (Previously Presented) The apparatus of claim 1, the packet header further including a length

2   field, wherein if the type field specifies the transaction type as a message and the message

3   specifies a data length, the length field specifies the data length.

1   31. (Previously Presented) The apparatus of claim 1, wherein the transaction type to include the

2   memory request comprises the memory request to include a memory write request.

1   32. (Currently Amended) The apparatus of claim 31, the packet header further including a byte

2   enable field to specify which bytes at a beginning portion of a data payload for the request

3   transaction layer packet are enabled, the beginning portion to include a first 4 bytes of data in

4   the payload data, wherein the byte enable field includes 4 bits, each bit to correspond to a

5   given byte in the first 4 bytes of data, a value of 1 in each bit to specify that a corresponding

6   given byte is enabled, enabled to include an indication to a logical device addressed by the

7   packet header to write the corresponding given byte to a memory.

1   33. (Currently Amended) The apparatus of claim 32, the packet header further including another

2   byte enable field to specify which bytes at an ending portion of a data payload for the request

3   transaction layer packet are enabled, the ending portion to include a last 4 bytes of data in the

4   payload data, wherein the byte enable field includes 4 bits, each bit to correspond to a given

5   byte in the last 4 bytes of data, a value of 1 in each bit to specify that a corresponding given

6   byte is enabled.

1   34. (Previously Presented) The apparatus of claim 6, wherein the format field to specify the size

2   of the packet header comprises the size of the packet header based on a 32-bit addressing

3   format.

1   35. (Canceled).

1   36. (Previously Presented) The apparatus of claim 6, wherein the format field to specify the size

2   of the packet header comprises the size of the packet header based on a 64-bit addressing

3   format.

1   37. (Previously Presented) The apparatus of claim 6, wherein the packet header comprises the

2   packet header including a length field, the length field to specify the length of payload data.

1   38. (Currently Amended) The apparatus of claim 37, wherein the <u>transaction layer</u> ~~data path unit~~

2   is to compare the length specified in the length field to an actual length of the payload data

3   and to treat the <u>request</u> transaction ~~layer~~ packet as a malformed <u>request</u> transaction ~~layer~~

4   packet based on the actual length not matching the length specified in the length field.